EDGE-540T

Instruction Manual

EDGE 540T

OPERATING MANUAL

Specifications:

Length: 33.1 inches
Wing Span: 36.6 inches
Wing Area: 17.9dm²
Flying Weight: 19oz
Wing Loading: 30.2g/dm²
Motor: Brushless High Torque 850kv Motor
Propeller: 11 X 4.7
Battery: 3 cell 11.1V Li-Poly 1800mAh
Radio: F.M. 4 Channel on 72MHZ Band
Speed Control: Sensorless 18 Amp
Servos: 9 Gram Micro (3Pcs)

Thank you for purchasing the Edge-540T. This airplane has been designed for intermediate to advanced and expert R/C fliers and has full aerobatic characteristics; inside loops, outside loops, axial rolls, inverted flight, knife edge, and spins are possible. This kit has many state of the art components such as a brushless outrunner high torque 850kv motor, a sensorless 18 amp speed control, and an 1800 mah 11.1 Volt Li-poly battery pack.

Safety Precautions

1) Never fly the EDGE-540T where there are crowds of people, power lines overhead, automobiles or near highways. Give yourself plenty of room for flying, as the plane can travel at a high rate of speed. Remember you are responsible for the safety of others.

2) Do not fly in strong winds.

3) Do not attempt to catch the EDGE-540T while flying.

4) Children under 16 years old should have an adult present.

5) Never leave this system unattended, with the batteries in the unit and around children. Injury can result by children turning on the transmitter or the plane.

6) Keep away from the propeller at all times. The system can automatically start when the batteries are plugged in, regardless if the transmitter is in the on or off position. The propeller can cause injury!

7) Before flying, always remember to turn on the transmitter first, before plugging in the battery pack. Stay clear of propeller.

8) Always turn the speed controller all the way down (left control stick in the down position) before starting; otherwise the propeller will start on full power when you plug the battery into the plane.

9) After running the motor, disconnect the battery first before turning off the transmitter, otherwise the propeller may start at full power.

10) Never leave the charger or battery near wet areas.

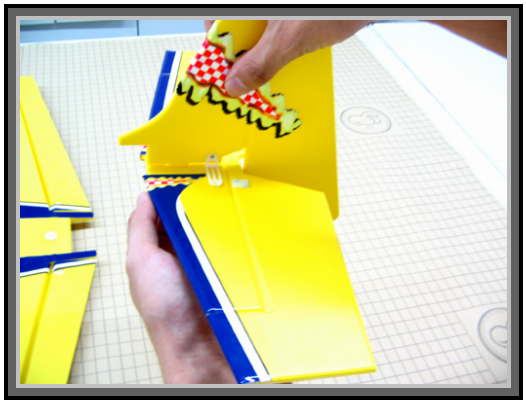
11) Completely discharging a Li-poly battery can result in permanent damage to the cells of the battery. Therefore you must always remember to disconnect the battery after using the plane.

Kit Contents of EDGE-540T

Fuselage with pre-installed electronics and brushless motor • main wing with pre-installed servo • elevator • rudder • 4 channel F.M transmitter • 11.1 Volt Li-Poly 1800 mah battery • 90 minute peak charger with auto-cutoff • landing gear and tail wheel •prop nose cone • 11x4.7 propeller

ASSEMBLY

Steps 1-3

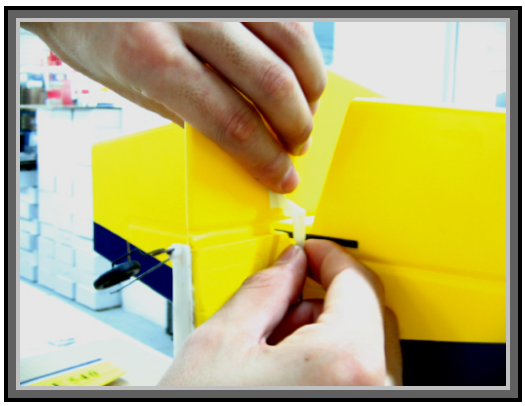
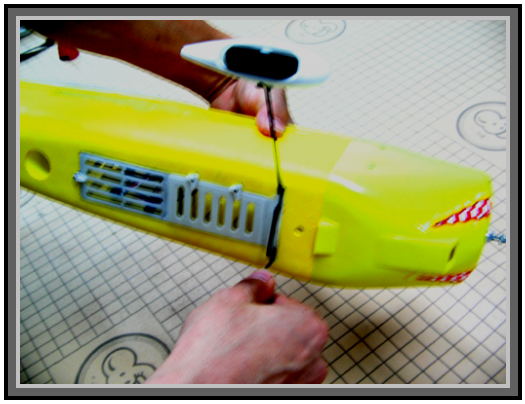
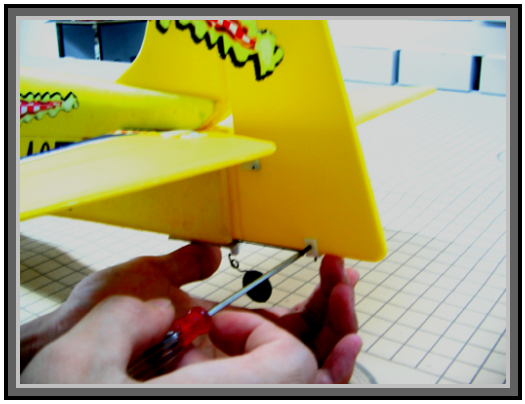


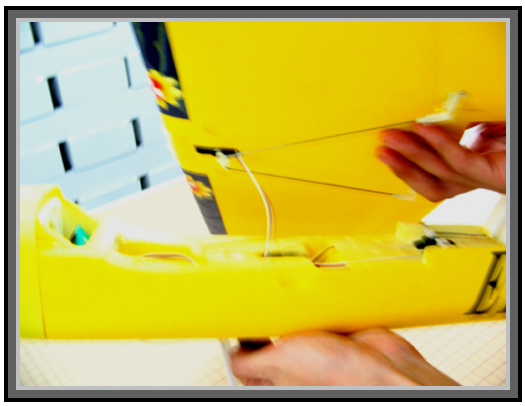
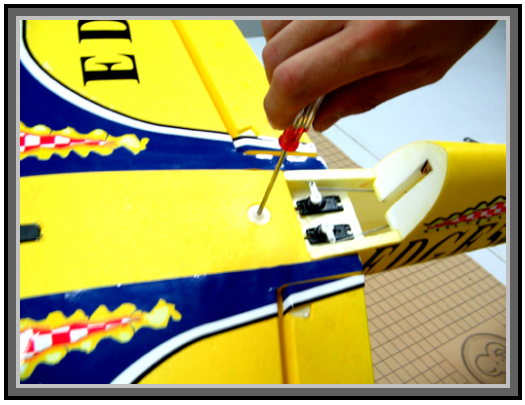
1) Slide the Rudder (vertical stab) into elevator (horizontal stab). Make sure the control horn on elevator is facing down when you do this. Line up plastic (L-shape piece on Rudder) onto the molded groove on the elevator.

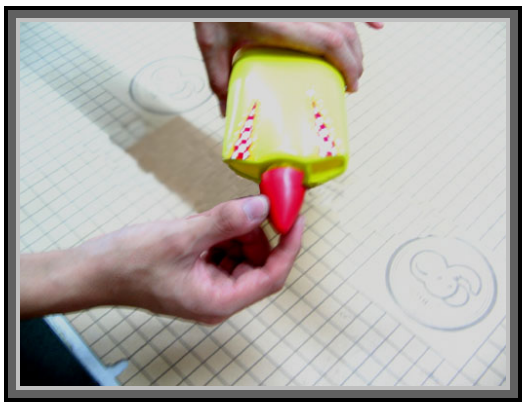
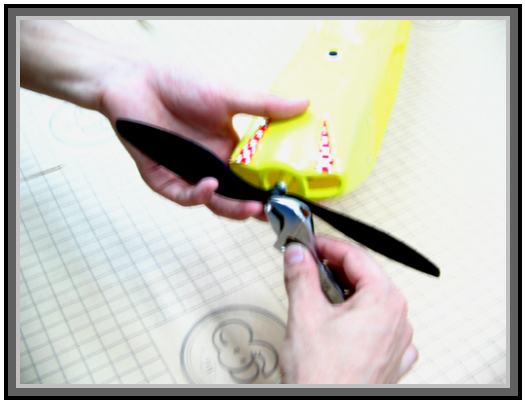
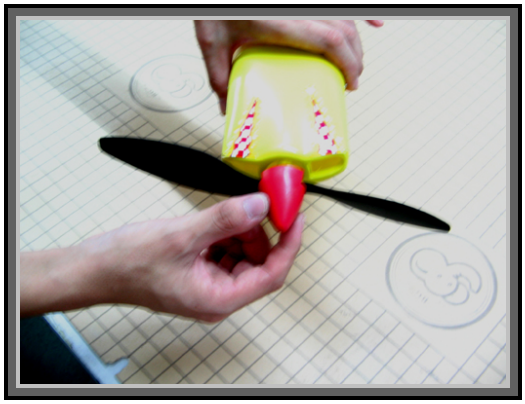
2) Insert the assembled tail into the fuselage. Make sure that the tail is fully secured into the fuselage by gently pushing it forward as far as it can go.

3) Use the small silver flat head screw in the accessories pack to fasten each side of the rudder to the elevator. Make sure the screw catches into the plate on the opposite side.

Steps 4-6

	4) Gently open the clevis and fasten it to the inner most hole on the control horn on both the rudder and the elevator (using the inner most hole provides maximum control throws that are recommended for proper aerobatics). You may need to adjust the clevis for neutral position.
	5) Insert the main landing gear into the small opening in front of the battery bay on the underside of the fuselage.
	6) Attach the tail wheel onto the rudder with the plastic U-shaped piece and fasten it with the black self tapping screw. Make sure the U-shaped piece is pushed as far back as it can go.

Steps 7-9	
	7) Remove the top canopy by un-screwing set screw counter clockwise. Slide the wire coming out of the aileron servo into the receiver cabin as shown. Now flip the plane over and insert aileron servo into channel 1 on receiver. (Make sure to match the colors of all the plug wires for correct polarity)
	8) Insert the main wing onto the fuselage by inserting the male plastic portion into female receptor.
	9) Use the nylon bolt to fasten the main wing to the fuselage. Do not over tighten.

Steps 10-12	
	10) Take off the pre-installed propeller spinner.
	11) Attach the propeller by sliding it onto the motor shaft. Tighten the nut holding the propeller securely onto the motor shaft.
	12) Now gently push the rubber nose cone onto the motor shaft end.

Steps 13-14

	13) Plug the battery into the speed controller. Next, insert the connected wires into the front opening of the cabin inside the battery bay. (Make sure the wires are clear of the battery bay so that the battery can be pushed in fully.
	14) Now slide the battery in securely and close the cover with both tabs.

Setting up Controls:

Setting up your transmitter controls properly is the key to having full control over Edge 540T.
Follow these simple steps:
1) Turn on transmitter
2) Plug in flight battery into aircraft.
3) Set all trim tabs on Radio to the neutral (middle) position.
4) Observe all flight surfaces and confirm that they are all in the neutral positions. If they are not, unscrew control arm off the servo controlling that specific function and re-place control arm on servo until neutral position is obtained. The goal is to make sure that control throw is near equal for each direction of input.
5) For maximum control throw the attach the plastic clevis to the inner most hole on the control horn, and the connect the metal pushrod to the inner most hole on the servo arm. If doing this makes the plane too reactive for your skill level then back off one hole or two hole positions accordingly.

Radio Control System

4ch,Mode I

4ch,Mode II

Caring for your Li-Poly Battery

- Plug the charger into the AC power outlet.

Warning: This charger is for 3-cell 11.1 Volt Li-Poly batteries only.

- Charger will completely charge the battery in 1 to 2 hours. It will cut off automatically after the battery is fully charged.
- The red light is on while charging and the green is on when fully charged.
- Never completely discharge a Li-poly battery. Doing so may result in irreversible damage.
- Keeping the Li-poly fully charged when storing, will lengthen the life of the battery.
- Do not charge the battery immediately after use. Wait at least 30 minutes for battery to cool down.

Flight Adjustment

1) EDGE-540T will fly optimally with fully-charged batteries.

2) Keep plane properly trimmed in all neutral positions before takeoff. When you find that it's difficult to fly the plane straight, adjust the trim tabs on the transmitter. For example, when you find that the plane is flying towards the left, push the trim tab on the transmitter to inverse the direction.

Flight Instruction

1) Never fly in strong wind more than 7 mph.

2) Do not fly in where the same frequency model plane is flying nearby.

3) Taking off

Always take off toward the wind. If you want to launch the plane by hand, apply full throttle and run several feet, and throw the plane horizontally into the wind. If you want to launch the plane on the ground, apply full throttle and let the plane accelerate on the ground in a straight line for approximately 15 feet. Now pull up on the elevator (down stick), and cruise to a safe flying altitude.

4) Flying

To maintain level flight, only 30% throttle is needed. Flying at partial throttle will provide longer flight times. Full throttle is recommended when performing aerobatic flight maneuvers.

5) Landing

When it is time for you to land straighten the wing for level flight, then cut your throttle to zero and make your approach. When you are about 5 feet from your landing area, gently apply up elevator (down stick) for a smooth landing.

Trouble Shooting

Problem	Cause	Solution
1. Motor does not run	*A) Flight battery is not fully charged.* *B) Start switch was not pressed.* *C) Transmitter battery is not fully charged.* *D) A crash has damaged an internal component.*	*If A) Recharge the flight battery.* *If B) Press the start switch once.* *If C) Replace the batteries with new ones.* *If D) Replace the component with a new one.*
2. Plane doesn't fly straight	*A) The rudder or the ailerons are not on the center position. (neutral)* *B) The main wing has not been attached properly to the fuselage center.*	*If A) Adjust the trim tabs on the transmitter.* *If B) Reattach the main wing.*
3. Plane does not climb	*A) Flight battery is not fully charged.* *B) The elevator declines downward.*	*If A) Recharge the flight battery.* *If B) Adjust the trim tabs on the transmitter.*
4. Decreased transmitter range	*A) Transmitter battery is not fully charged.* *B) The antenna of the transmitter is not fully extended*	*If A) Replace the batteries with new ones* *If B) Extend the antenna completely.*

Flight Tips

1) If you have a computer flight simulator, it is a good idea to practice with it before actually flying the EDGE-540T.

2) Taxi the plane on the ground at a very slow speed to familiarize yourself with the controls.

3) When first learning how to fly, apply gentle directional inputs to avoid sudden extreme movements which may cause you to panic and crash.

4) If you have access to a flight instructor with experience, you will be more likely to succeed the first time you fly.

5) Always keep the airplane in front of you. If you fly from behind it may cause you to become disoriented and lose control of the plane.

6) It is a good idea to purchase at least one more battery from your local hobby dealer to provide you with longer flight time. After your first flight, please allow the motor and battery to cool in the plane for a couple of minutes to ensure the longevity of your components.

Spare Parts

If you damage parts of your EDGE-540T, you may check with your local hobby shop dealer where you purchased your EDGE-540T for replacements or visit manufacture's website.